



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,576	11/20/2001	Toshiro Ariga	011559	9002

23850 7590 01/15/2003

ARMSTRONG, WESTERMAN & HATTORI, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

NILAND, PATRICK DENNIS

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 01/15/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. 09/926,576	Applicant(s) ARIGA ET AL.
Examiner Patrick D. Niland	Art Unit 1714

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10/30/02.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1714

The amendment of 10/30/02 has been entered. Claims 1 and 11-20 are pending.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 8283557

Shimadzu Corp..

Shimadzu discloses the instantly claimed polyester compositions and sheets and fibers thereof at page 2, left column, lines 2-7 and 17-20; page 3, left column, line 48 to page 3, right column, line 30. The polyester of the reference clearly has the instantly claimed molecular weight. See column 4, lines 23-30 of the reference. It is expected to inherently possess the instantly claimed broad Tg because it is soft and flexible, which indicates clearly a low Tg. The same polyester molecule reads on both components III and IV and the same polyester can be divided in any manner without affecting the composition properties. Therefore, the instantly claimed amounts are also met by the reference's polyester of the sections disclosed above.

Art Unit: 1714

4. Claims 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 5616657 Imamura et al..

The examples of Imamura et al. anticipate the instantly claimed polyester compositions. See the examples for Tg and Mw. Since only ester moieties are required by the instant claims, the polymer of the patentee can be divided into ester segments according to the instantly claimed amounts and still have ester moieties in both portions of a given molecule sample that meets the instantly claimed amounts. The patentee is silent as to the remaining physical properties of the instant claims. Since the patentee's polyesters otherwise meet the limitations of the instant claims, they are expected to necessarily inherently possess the other properties of the instant claims, particularly where the instantly claimed ranges are extremely broad and are therefore more likely to encompass the patentee's polymer. The same polymer meets both polyesters in the instantly claimed polyester blends also since no limitations differentiating the two polyesters are seen. It would have been understood by the ordinary skilled artisan that the dimer acids of the patentee, column 6, lines 66-67, would have the instantly claimed number of carbons. See the patentee's examples. The applicant presents no arguments regarding claims 11-20. This rejection is therefore maintained.

5. Claims 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 844066 Kakizawa.

Kakizawa discloses the instantly claimed polyester. See columns 5 and 6. The comonomers are added expressly to obtain a softer, i.e. lower Tg, polyester. See column 12, lines 47-67.

Art Unit: 1714

Lowering the Tg of polylactide necessarily gives the instantly claimed Tg. See column 13 and the remainder of the document. Since only ester moieties are required by the instant claims, the polymer of the patentee can be divided into ester segments according to the instantly claimed amounts and still have ester moieties in both portions of a given molecule sample that meets the instantly claimed amounts. The patentee is silent as to the remaining physical properties of the instant claims. Since the patentee's polyesters otherwise meet the limitations of the instant claims, they are expected to necessarily inherently possess the other properties of the instant claims, particularly where the instantly claimed ranges are extremely broad and are therefore more likely to encompass the patentee's polymer. The same polymer meets both polyesters in the instantly claimed polyester blends also since no limitations differentiating the two polyesters are seen. It would have been understood by the ordinary skilled artisan that the dimer acids of the patentee would have the instantly claimed number of carbons. See the patentee's examples. The applicant presents no arguments regarding claims 11-20. This rejection is therefore maintained.

6. Claims 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 5525671 Ebato et al..

Ebato et al. discloses the instantly claimed polyester at column 2, lines 22-48; column 9, lines 42-67; column 10, lines 8-67; column 11, lines 42-49; column 12, lines 1-27; column 14, lines 34-67; and the examples. Since only ester moieties are required by the instant claims, the polymer of the patentee can be divided into ester segments according to the instantly claimed amounts and still have ester moieties in both portions of a given molecule sample that meets the instantly

Art Unit: 1714

claimed amounts. The patentee is silent as to the remaining physical properties of the instant claims. Since the patentee's polyesters otherwise meet the limitations of the instant claims, they are expected to necessarily inherently possess the other properties of the instant claims, particularly where the instantly claimed ranges are extremely broad and are therefore more likely to encompass the patentee's polymer. The same polymer meets both polyesters in the instantly claimed polyester blends also since no limitations differentiating the two polyesters are seen. It would have been understood by the ordinary skilled artisan that the dimer acids of the patentee would have the instantly claimed number of carbons. See the patentee's examples. The applicant presents no arguments regarding claims 11-20. This rejection is therefore maintained.

7. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of US Pat. No. 5616657 Imamura et al., US Pat. No. 844066 Kakizawa., and US Pat. No. 5525671 Ebato et al. in view of US Pat. No. 6114495 Kolstad et al..

Imamura et al., Kakizawa, and Ebato et al. each disclose the above discussed compositions, the fact that lowering Tg is desired, i.e. softness is desired, and that plasticizers, including polyester plasticizers may be used. See Imamura et al., column 19, lines 50-55, Kakizawa, column 13, lines 49-67, and Ebato et al., column 12, lines 1-17. Kolstad et al., column 19, lines 31-56; column 20, lines 14-16 and 29-30; column 26, lines 63-67; and column 27, lines 1-23 shows that plasticizers work by lowering Tg and that this lowered Tg improves various properties related to the instantly claimed impact resistance since a compound with more flexibility necessarily possesses increased impact resistance over the corresponding rigid article. It would

Art Unit: 1714

have been obvious to one of ordinary skill in the art at the time of the instant invention to add the instantly claimed polyester to the claimed polymer composition in order to lower Tg and thereby improve impact resistance, as discussed above, because Kolstad shows that lowering Tg will give increased flexibility, the primary references show addition of monomers that lower Tg to polylactides, and the use of these polylactides in polymer mixtures will lower the Tg as would have been expected by the ordinary skilled artisan and is predictable by the Fox Tg equation. See Kolstad et al., column 26, last paragraph particularly. The applicant presents no arguments regarding claims 11-20. This rejection is therefore maintained.

8. Claim 1 is allowable over the prior art considered.

The prior art does not suggest the invention of the instant claim 1.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

Art Unit: 1714

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Niland whose telephone number is (703) 308-3510. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 before final rejection and (703) 872-9311 after final rejection.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

pn

January 12, 2003

  
Patrick Niland  
Primary Examiner  
Art Unit 1714